



MARK A. YOUNG  
EXECUTIVE DIRECTOR

# LOWELL REGIONAL WASTEWATER UTILITY

WASTEWATER COLLECTION AND TREATMENT



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**TO:** Doug Koopman PE  
USEPA Region 1  
5 Post Office Square Suite 100  
Boston MA 02139

**SUBJECT:** Clarifier Upgrades at Lowell's Duck Island Facility

**DATE:** December 10, 2019

Mr. Koopman:

I am writing to request a time extension for the completion of upgrades to the primary and secondary clarifiers at Lowell's Duck Island Wastewater Treatment Facility.

Lowell is unable to meet the requirement to complete its clarifier upgrades by December 31, 2019 that was included in the October 2017 Administrative Order (CWA-AO-RO1-FY17-016) and previously extended in August 2018.

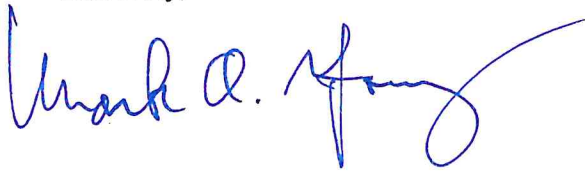
The clarifier upgrades are part of a \$16M improvement project that has been under construction since July 2018. The upgrades include replacement of the six primary and four secondary clarifier mechanisms. As of December 2019, three of the primary clarifiers and two of the secondary clarifiers have been upgraded. The current construction schedule calls for the remaining clarifiers to be upgraded through the spring and summer of 2020.

The main contributing causes of the construction delay were a design issue associated with the secondary clarifiers and failure of the clarifier coating system. During assembly of the first mechanism, a 4-inch discrepancy was identified between the existing water surface elevation in the secondary clarifiers and the elevation that the new mechanisms were designed for. To correct the issue the secondary clarifier had to be uninstalled, field modified, and then reinstalled, resulting in a significant impact to the construction schedule.

The work was further delayed due to a failure of the coating system on numerous clarifier mechanism parts. Many of the parts had to be shipped back to the manufacturer for repainting and an entire clarifier mechanism was repainted in place. This resulted in long lead times, an extended delivery schedule of the clarifier mechanisms, and installation delays.

Considering these factors, Lowell is requesting a revised completion date of September 30, 2020 for its clarifier replacement project. If you need any additional information, or if you have any questions, please contact me at 978-674-1675.

Sincerely,



Mark A. Young  
Executive Director  
Lowell Wastewater Utility  
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Kevin Brander, MassDEP Section Chief – Wastewater Management Section  
Mike Stuer, Engineering Manager  
Aaron Fox, Operations Manager  
John Taylor, Maintenance Manager  
Evan Walsh, Engineering Supervisor